



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 10/767,037 | 01/28/2004 | Charles W. Finkl | FINKL162CIPD2 | 4800 |

7590

01/18/2005

James G. Staples
A. Finkl & Sons Co.
2011 North Southport Avenue
Chicago, IL 60614

| |
|----------|
| EXAMINER |
|----------|

KASTLER, SCOTT R

| | |
|----------|--------------|
| ART UNIT | PAPER NUMBER |
|----------|--------------|

1742

DATE MAILED: 01/18/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | | |
|------------------------------|-----------------|--------------|--|
| Office Action Summary | Application No. | Applicant(s) | |
| | 10/767,037 | FINKL ET AL. | |
| | Examiner | Art Unit | |
| | Scott Kastler | 1742 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 November 2004.
- 2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 28 January 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Means-Plus Function Language

Instant claims 1 and 10 contain the following terms, couched in means-plus function format:

1. "means for confining the heat from the electric heat source to the body-shank junction portion of the die block" (claim 1, lines 9-10).
2. "means for subjecting said selected portion to electrical energy derived from said source of infrared heating" (claim 10, lines 4-5)
3. "means for maintaining" (claim 10 lines 6-7)
4. "means for controlling" (claim 10 lines 8-9)

However, none of the above "means" are sufficiently described in the originally filed specification to meet the requirements of a proper means plus function claim, and therefore, these terms have been interpreted to allow for any structure which would allow for the performance of the recited function.

Claim Objections

Claims 6 and 8 are objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. The above claims do not fairly further limit the independent apparatus claim 1 from which they depend because the above claims contain only limitations dealing with the manner or method in which the claimed apparatus is to be employed

Art Unit: 1742

(the specific placement of the apparatus near or abutting a shank body to be treated or the operating power to be employed). It has been well settled that the manner or method of use of an apparatus cannot be employed to fairly further limit claims to the apparatus itself. See *In re Casey*, 152 USPQ 235, and MPEP 2114 and 2115.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 4 and 7-9 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The above claims are indefinite for the following reasons:

1. With respect to claim 4, this claim includes a Markush group which is improperly open, in that the Markush group is listed employing the term “the group comprising” language, thereby improperly opening the group to other, unnamed components and rendering the scope of the claim unascertainable.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1 and 7-10 are rejected under 35 U.S.C. 102(b) as being anticipated by

Nishikawa. Nishikawa teaches that it was known in the art at the time the invention was made to employ electric heating from infrared heaters in the form of halogen lamps (including tungsten halogen lamps) to selectively harden portions of a workpiece while employing means for confining the heat from the lamps to the portion to be heated (see col. 4, line 50 to col. 7 line 5 for example) thereby showing all properly limiting aspects of the above claims since the use of the claimed apparatus to specifically heat treat any particular type of workpiece in any particular type of heat treating process cannot be relied upon to fairly further limit claims to the apparatus itself when, as in the instant case, the applied prior art apparatus could be employed if desired to perform the claimed function. See MPEP 2114 and 2115.

Claims 1-6 are rejected under 35 U.S.C. 102(b) as being anticipated by the ASM Handbook, vol. 4 “Induction Heat Treating of Steel” (ASM vol.4). ASM vol. 4 teaches shaped induction heating coils for the selective hardening of workpieces (see fig. 15 on page 174 for example) and including insulating non-magnetic materials for surrounding at least partially portions of the coils (see “Coil Insulation on pages 180-181 for example), thereby showing all aspects of the above claims since the use of the claimed apparatus to specifically heat treat any particular type of workpiece in any particular type of heat treating process cannot be relied upon

Art Unit: 1742

to fairly further limit claims to the apparatus itself when, as in the instant case, the applied prior art apparatus could be employed if desired to perform the claimed function. See MPEP 2114 and 2115.

Response to Arguments

Applicant's arguments filed on 11-8-2004 have been fully considered but they are not persuasive. Applicant's argument that the presently presented amendments to the specification now make the "means-plus-function" terms in the instant claims in proper form is not persuasive because the amendments do not further specify the means employed beyond stating that any means capable of performing the function could be employed.

Applicant's arguments that the objections and rejections under 35 USC 112 second paragraph have now been overcome by the instant amendments are not persuasive for the reasons given in the above rejections.

Applicant's argument that Nishikawa employs a graphite mask between the heat source and the workpiece is not persuasive because, firstly, this mask is stated by Nishikawa to be optional only and not required, and secondly, the mask does not intervene between the section to be heated and the electric heat source, but rather performs the function of the "means for confining" as stated in the above rejection. Applicant's further argument that both of Nishikawa and ASM vol. 4 are intended for different purposes is also not persuasive because as stated in the above rejections, since both of Nishikawa and ASM vol. 4 teach all of the claimed structure, and could be operated in the manner recited, the actual manner or method of operation of the applied references compared to the intended operation of the apparatus of the instant claims

Art Unit: 1742

cannot be relied upon to fairly further limit claims to the apparatus itself. See MPEP 2114 and 2115.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

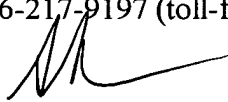
A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Scott Kastler whose telephone number is (571) 272-1243. The examiner can normally be reached on Monday through Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Roy King can be reached on (571) 272-1244. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 1742

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Scott Kastler
Primary Examiner
Art Unit 1742

sk